



UNITED STATES PATENT AND TRADEMARK OFFICE

Cla
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,808	02/10/2004	Ikue Shimizu	S004-5208	9691
40627	7590	04/05/2007	EXAMINER	
ADAMS & WILKS 17 BATTERY PLACE SUITE 1231 NEW YORK, NY 10004			PHAN, THANH S	
			ART UNIT	PAPER NUMBER
			2833	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/05/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/775,808	SHIMIZU, IKUE	
	Examiner Thanh S. Phan	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>02/10/04</u> .	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art [figure 9 Prior Art]; AAPA hereinafter; in view of Nishikigi [US 5,951,322].

Regarding claim 1. AAPA discloses an electronic device [figure 9] comprising: two substrates [3 and 4] laminated vertically, at least one of which being curved [3]; a belt-shaped wiring member for connecting electrically the two substrates.

AAPA discloses the claimed invention except for the wiring member being flexible and a stress relaxation portion for easing a stress, which works on the wiring member by a connection between the wiring member and the substrate having a curved shape.

Nishikigi teaches a flat cable connecting structure with strain relief comprising flexible wiring connecting member/cable [10] comprising a stress relaxation portion for easing a stress, which works on the cable/wiring member by a connection between the wiring member and the substrates [abstract].

Since AAPA and Nishikigi are both from the same field of endeavor, providing connection between substrates, the purpose disclosed by Nishikigi would have been recognized in the pertinent art of AAPA.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify AAPA with the connection design as teach by Nishikigi for the purpose of relieving strain/stress.

Regarding claim 2. Nishikigi further discloses wherein a connector having a bent-shape or curved-shape is formed as the stress relaxation portion on one of the substrates, and wherein the wiring member is connected in a bent or curved manner correspondingly to the bent-shape or curved-shape of the connector [figures 1 & 2].

Regarding claim 5. AAPA discloses an electronic device [figure 9] having a display unit [3] that is curved in a three-dimensional shape, comprising: a display panel [3] that composes the display unit and is curved; a panel-shaped circuit block [4] that controls the display panel; a casing [2] that receives the display panel and the circuit block, and forms an outer shell of the electronic device; a wiring member [12] that connects electrically the display panel with the circuit block in the casing, an intermediate portion of the wiring member being folded back in the casing.

AAPA discloses the claimed invention except for the wiring member is belt-shaped and; and a flexure absorbing portion that absorbs a flexure generated in the wiring member by a connection between the wiring member and a curved part of the display panel.

Nishikigi teaches a flat cable connecting structure with strain relief comprising flexible wiring connecting member/cable [10] comprising a stress relaxation portion for easing a stress, which works on the cable/wiring member by a connection between the wiring member and the substrates [abstract].

Since AAPA and Nishikigi are both from the same field of endeavor, providing connection between substrates, the purpose disclosed by Nishikigi would have been recognized in the pertinent art of AAPA.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify AAPA with the connection design as teach by Nishikigi for the purpose of relieving strain/stress.

Regarding claim 6. Nishikigi further discloses wherein the wiring member is provided with a curved portion as the flexure absorbing portion, the curved portion being curved substantially spherically out of a surface of the wiring member [figures 1&2].

Regarding claims 7, 8. AAPA and Nishikigi disclose wherein the wiring member is connected to the display panel and the circuit block. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, the limitation; by heat sealing; has not been given patentable weight.

Regarding claims 9-12. AAPA discloses wherein the electronic device is a watch, and wherein the casing [2] has an opening [10] on the display unit side and a closed bottom, and, under a condition that the circuit block and the display panel are contained in the casing, a three-dimensional display cover [11] is mounted on the opening of the casing.

Regarding claim 13. The method steps are necessitated by the disclosed apparatus structure.

Claim 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Nishikigi as applied to claim 1 above, and further in view of Schmich [US 6,396,709].

Regarding claims 3, 4. AAPA; as modified; discloses the claimed invention except for wherein the belt-shaped wiring member is provided with a deformed portion as the stress relaxation portion, the deformed portion being curved toward such a direction that the stress, which works on the wiring member, can be eased.

Schmich discloses an apparatus wherein the belt-shaped wiring member [4] is provided with a deformed portion [6] as the stress relaxation portion, the deformed portion being curved toward such a direction that the stress, which works on the wiring member, can be eased [figures 4 & 5].

Since AAPA; as modified; and Schmich are both from the same field of endeavor, providing connection between substrates, the purpose disclosed by Schmich would have been recognized in the pertinent art of AAPA; as modified. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modified AAPA; as modified; with the cable design of Schmich for the purpose of increase the easing of stress.

Conclusion

Art Unit: 2833

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Randall et al. [US 6,918,179] ; Yatskov et al. [US 6,302,705] ; Murai et al. [US 2002/0057235].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2001 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tsp



Vit Miska
Primary Examiner